Appl. No. 09/925,159
Amdt. dated April 2, 2007
Reply to Office Action of January 4, 2007

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.   (Previously presented) A method comprising:

serially receiving, from a source, a plurality of forward messages each addressed to a corresponding destination among a plurality of destinations;

storing each forward message before attempting to send the forward message to its corresponding destination;

for each stored forward message, receiving an availability signal indicating whether its corresponding destination is available to accept the stored forward message before attempting to send the stored forward message to its corresponding destination;

for first stored forward messages whose corresponding first destinations are available, simultaneously sending the first stored forward messages to their corresponding first destinations, wherein a stored forward message is sent only to its corresponding destination and not until after receiving an availability signal indicating that the destination is available;

subsequent to sending the first stored forward messages, simultaneously receiving, after a predetermined period of time, a plurality of reverse messages from the first destinations, each reverse message corresponding to one of the first stored forward messages; and

serially sending the reverse messages to the source.

2.   (Previously presented) The method of claim 1, wherein the source identifies each of the forward messages by a different tag, further comprising:

placing a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from the destination the reverse message corresponding to the forward message; and

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sending the tag to the source with the reverse message, whereby the source associates the reverse message with the forward message.

3.   (Original) The method of claim 1, further comprising:

associating a priority with each forward message; and

sending a forward message to a destination when that forward message has a higher priority than other forward messages addressed to that destination.

4.   (Original) The method of claim 3, wherein the priority of each forward message represents an age of that forward message.

5.   (Previously presented) The method of claim 1, further comprising:

associated a priority with each reverse message; and

sending a reverse message to the source when that reverse message has a higher priority than other reverse messages.

6.   (Original) The method of claim 5, wherein the priority of each reverse message represents an age of that reverse message.

7.   (Original) The method of claim 1, wherein each destination is a memory bank, each forward message is a memory transaction, and each reverse message is the result of one of the memory transaction.

8-14.   (Canceled)

15.   (Previously presented) A computer program product, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

serially receive, from a source, a plurality of forward messages each addressed to a corresponding destination among a plurality of destinations;

store each forward message before attempting to send the forward message to its corresponding destination;

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receive an availability signal for each stored forward message indicating whether its corresponding destination is available to accept the stored forward message before attempting to send the stored forward message to its corresponding destination;

for first stored forward messages whose corresponding first destinations are available, simultaneously send the first stored forward messages to their corresponding first destinations, wherein a stored forward message is sent only to its corresponding destination and not until after receiving an availability signal indicating that the destination is available;

simultaneously receive, after a predetermined period of time, a plurality of reverse messages from the first destinations, each reverse message corresponding to one of the first stored forward messages; and

serially send the reverse messages to the source.

16.   (Previously presented) The computer program product of claim 15, wherein the source identifies each of the forward messages by a different tag, further comprising instructions operable to cause a programmable processor to:

place a tag in a delay buffer when sending to a destination the forward message identified by that tag, wherein the delay buffer implements a delay equal to the predetermined period of time such that the tag is available when receiving from the destination the reverse message corresponding to the forward message; and

send the tag to the source with the reverse message, whereby the source associates the reverse message with the forward message.

17.   (Original) The computer program product of claim 15, further comprising instructions operable to cause a programmable processor to:

associate a priority with each forward message; and

send a forward message to a destination when that forward message has a higher priority than other forward messages addressed to that destination.

18.   (Original) The computer program product of claim 17, wherein the priority of each forward message represents an age of that forward message.

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19.   (Previously presented) The computer program product of claim 15, further comprising instructions operable to cause a programmable processor to:

associate a priority with each reverse message; and

send a reverse message to the source when that reverse message has a higher priority than other reverse messages.

20.   (Original) The computer program product of claim 19, wherein the priority of each reverse message represents an age of that reverse message.

21.   (Original) The computer program product of claim 15, wherein each destination is a memory bank, each forward message is a memory transaction, and each reverse message is the result of one of the memory transactions.